Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1. (currently amended) A heater for heating a gaseous stream flowing in a downstream direction through a duct, the heater comprising:

a heating gas supply pipe extending at least partially across the duct, the heating gas supply pipe including a plurality of spaced-apart gas pipe outlets to discharge a portion of a heating gas into the duct generally in the downstream direction;

a flame shield extending from a location at or near the heating gas supply pipe at least partially across the duct;

a plurality of gas supply spuds disposed upstream of the flame shield, the gas supply spuds including a plurality of gas spud outlets to discharge another portion of the heating gas into the duct;

a plurality of jet pumps each extending from a jet pump inlet at an upstream location upstream of the flame shield to a jet pump outlet at a downstream location downstream of the flame shield, each jet pump inlet being disposed near one of the gas spud outlets to receive the heating gas from the gas spud outlet and being spaced by a distance from the one of the gas spud outlets to receive the duct gas from the gaseous stream for premixing of the heating gas and the duct gas in the jet pump.

2. (original) The heater of claim 1 wherein the flame shield includes a plurality of jet pump openings, and wherein each jet pump extends through one of the jet pump openings from the upstream location to the downstream location.

3. (original) The heater of claim 1 wherein the plurality of jet pumps are disposed on opposite sides of the heating gas supply pipe.

4. (original) The heater of claim 3 wherein the plurality of jet pumps are at least substantially symmetrically disposed on opposite sides of the heating gas supply pipe.

5. (original) The heater of claim 3 wherein the plurality of jet pumps are oriented generally parallel in the downstream direction.

6. (original) The heater of claim 3 wherein the plurality of jet pumps are oriented in a divergent manner with respect to the downstream direction and spaced by an angle of less than about 60 degrees.

7. (original) The heater of claim 1 wherein the jet pump inlets are flared.

8. (original) The heater of claim 1 wherein the jet pumps widen toward the jet pump outlets to form widened jet pump outlets.

9. (original) The heater of claim 1 wherein the jet pump outlets are disposed downstream with respect to the gas pipe outlets.

10. (original) The heater of claim 1 wherein the gas spud outlets are configured to discharge about 50-90% and the gas pipe outlets are configured to discharge about 10-50% of a total amount of heating gas.

11. (original) The heater of claim 1 wherein the gas spud outlets are sized to produce a fuel pressure of up to about 20-50 psig at the gas spud outlets.

12. (original) The heater of claim 1 wherein the heating gas supply spuds and the jet pumps are configured to provide premixing of the heating gas and the duct gas in the jet pumps with a stochiometric ratio of about 15-100%.

13. (original) The heater of claim 1 wherein the gas pipe outlets comprise orifices formed on the heating gas supply pipe.

14. (original) The heater of claim 1 wherein the flame shield comprises shield plates disposed on opposite sides of the heating gas supply pipe, the shield plates being obliquely inclined relative to the downstream direction through the duct.

15. (original) The heater of claim 1 wherein the flame shield comprises a plurality of duct gas openings to permit the duct gas of the gaseous stream therethrough.

16. (original) The heater of claim 1 wherein the heating gas supply spuds are coupled with the heating gas supply pipe to receive the heating gas from a common heating gas source.

17. (currently amended) A heater for heating a gaseous stream flowing in a downstream direction through a duct, the heater comprising:

a flame shield extending from an intermediate location of the duct partially toward opposite boundaries of the duct;

a plurality of jet pumps each extending from a jet pump inlet at an upstream location upstream of the flame shield to a jet pump outlet at a downstream location downstream of the flame shield, the jet pump inlets receiving a portion of the duct gas from the gaseous stream; and

means for supplying a portion of the heating gas into the duct at a gas discharge location which is downstream of the flame shield and near the intermediate location of the duct, and another portion of the heating gas into the duct as gas jets directed into the jet pump inlets of the jet pumps for premixing of the heating gas and the duct gas in the jet [[pump]] <u>pumps to be discharged through the jet pump outlets</u>.

18. (original) The heater of claim 17 wherein the means supplies about 10-50% of the heating gas to the gas discharge location and about 50-90% of the heating gas to the jet pump inlets of the jet pumps.

19. (original) The heater of claim 17 wherein the jet pump inlets are disposed downstream of the gas discharge location.

20. (original) The heater of claim 17 wherein the flame shield includes a plurality of jet pump openings, and wherein each jet pump extends through one of the jet pump openings from the upstream location to the downstream location.

21. (new) A heater for heating a gaseous stream flowing in a downstream direction through a duct, the heater comprising:

a heating gas supply pipe extending at least partially across the duct, the heating gas supply pipe including a plurality of spaced-apart gas pipe outlets to discharge a portion of a heating gas into the duct generally in the downstream direction;

a flame shield extending from a location at or near the heating gas supply pipe at least partially across the duct;

a plurality of gas supply spuds disposed upstream of the flame shield, the gas supply spuds including a plurality of gas spud outlets to discharge another portion of the heating gas into the duct;

a plurality of jet pumps each extending from a jet pump inlet at an upstream location upstream of the flame shield to a jet pump outlet at a downstream location downstream of the flame shield, each jet pump inlet being disposed near one of the gas spud outlets to receive the heating gas from the gas spud outlet and the duct gas from the gaseous stream for premixing of the heating gas and the duct gas in the jet pump;

wherein the flame shield includes a plurality of jet pump openings, and wherein each jet pump extends through one of the jet pump openings from the upstream location to the downstream location.

22. (new) A heater for heating a gaseous stream flowing in a downstream direction through a duct, the heater comprising:

a flame shield extending from an intermediate location of the duct partially toward opposite boundaries of the duct;

a plurality of jet pumps each extending from a jet pump inlet at an upstream location upstream of the flame shield to a jet pump outlet at a downstream location downstream of the flame shield, the jet pump inlets receiving a portion of the duct gas from the gaseous stream; and

means for supplying a portion of the heating gas into the duct at a gas discharge location which is downstream of the flame shield and near the intermediate location of the duct, and another portion of the heating gas into the duct as gas jets directed into the jet pump inlets of the jet pumps for premixing of the heating gas and the duct gas in the jet pumps;

wherein the flame shield includes a plurality of jet pump openings, and wherein each jet pump extends through one of the jet pump openings from the upstream location to the downstream location.